

We claim:

Sub A17 1. A method for carrying out simplex transmission of a data message modulated onto a carrier frequency, which comprises:

transmitting a data message more than one time using at least two different carrier frequencies in temporal succession to increase immunity to interference; and

only changing the carrier frequencies such that the frequencies occur within one single transmission channel.

Sub A17 2. The method according to claim 1, which further comprises using a different carrier frequency for each of more than two transmissions.

3. The method according to claim 1, which further comprises applying spreading to the data message by a predefined spread sequence.

4. The method according to claim 3, wherein the at least two different carrier frequencies have a frequency difference in an order of magnitude of a data rate of the data message

5. The method according to claim 3, wherein the at least two different carrier frequencies have a frequency difference in a

range between one quarter and two times a data rate of the data message.

6. The method according to claim 1, which further comprises applying spreading to the data message by a Direct Sequence Spread Spectrum method.

7. The method according to claim 6, wherein the at least two different carrier frequencies have a frequency difference in an order of magnitude of a data rate of the data message

8. The method according to claim 6, wherein the at least two different carrier frequencies have a frequency difference in a range between one quarter and two times a data rate of the data message.

9. The method according to claim 1, which further comprises setting the at least two different carrier frequencies within a tolerance range of at least  $\pm 10\%$ .

10. The method according to claim 1, which further comprises setting the at least two different carrier frequencies within a tolerance range of not more than  $\pm 10\%$ .

Sub 12  
11. A method for simplex radio transmission in a radio access control system, which comprises:

transmitting a data message more than one time using at least two different carrier frequencies in temporal succession to increase immunity to interference; and

only changing the carrier frequencies such that the frequencies occur within one single transmission channel.

Sub 13  
12. A device for carrying out simplex transmission of a data message modulated onto a carrier frequency, comprising:

a carrier frequency generator for generating different carrier frequencies, said carrier frequency generator having at least one capacitor and a detunable oscillator crystal detuned through said at least one capacitor; and

a transmitter modulating data messages with said carrier frequencies and transmitting the data messages in temporal succession.

Sub 14  
13. The device according to claim 12, wherein:

said at least one capacitor is a plurality of capacitors; and

a switch respectively connects at least one of said plurality of capacitors to said oscillator crystal to generate different carrier frequencies.

14. The device according to claim 13, wherein said switch is a program-controlled switch.

15. The device according to claim 13, including a carrier frequency control device for setting different carrier frequencies in a case of multiple transmission, said control device connected to at least one of the group consisting of said plurality of capacitors and said switch.

16. A device for carrying out simplex transmission of a data message modulated onto a carrier frequency, comprising:

a carrier frequency generator for generating different carrier frequencies, said carrier frequency generator having at least one capacitor and a detunable oscillator crystal detuned through said at least one capacitor; and

a transmitter modulating data messages with said carrier frequencies and transmitting the data messages more than one time using at least two different carrier frequencies in temporal succession to increase immunity to interference; said

carrier frequencies only changed to have said carrier frequencies occur within one single transmission channel.

Subcl 17. The device according to claim 16, wherein:

said at least one capacitor is a plurality of capacitors; and

a switch respectively connects at least one of said plurality of capacitors to said oscillator crystal to generate different carrier frequencies.

18. The device according to claim 17, wherein said switch is a program-controlled switch.

19. The device according to claim 17, including a carrier frequency control device for setting different carrier frequencies in a case of multiple transmission, said control device connected to at least one of the group consisting of said plurality of capacitors and said switch.